

We claim:

- 5 1. A process for producing polyurethanes by reacting at least one polyisocyanate with at least one compound containing at least two hydrogen atoms which are reactive toward isocyanate groups, wherein the compound containing at least two active hydrogen atoms which is used is at least one polyether alcohol prepared by addition of alkylene oxides onto
- 10 H-functional initiator substances by means of multimetal cyanide catalysis and the reaction is carried out in the presence of at least one metal salt of the formula

$M(A^+)_a X(B^-)_b$, where

M is selected from among Li^+ , Na^+ , K^+ , Rb^+ , Cs^+ , Be^{2+} , Mg^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} ,

X is selected from among F^- , Cl^- , ClO^- , ClO_3^- , ClO_4^- , Br^- , I^- , IO_3^- , CN^- , OCN^- , NO_2^- , NO_3^- , HCO_3^- , CO_3^{2-} , S^{2-} , SH^- , HSO_3^- , SO_3^{2-} , HSO_4^- , SO_4^{2-} , $S_2O_2^{2-}$, $S_2O_3^{2-}$, $S_2O_4^{2-}$, $S_2O_5^{2-}$, $S_2O_6^{2-}$, $S_2O_7^{2-}$, $S_2O_8^{2-}$, $H_2PO_2^-$, $H_2PO_4^-$, HPO_4^{2-} , PO_4^{3-} , $P_2O_7^{4-}$, $(OC_nH_{2n+1})^-$, $(C_nH_{2n-1}O_2)^-$, $(C_{n+1}H_{2n-2}O_4)^{2-}$ where $n = 1-20$ and their mixed salts and mixtures, where

A^+ is the valence of the cation,
 B^- is the valence of the anion and
 a and b are integers,

with the proviso that the compound is electrically neutral.

2. A process as claimed in claim 1, wherein the metal salt $M(A^+)_a X(B^-)_b$ is selected from among:

$M(A^+) = Li^+$, Na^+ , K^+ , NH_4^+ , Mg^{2+} , Ca^{2+} , and
 $X(B^-) = F^-$, Cl^- , Br^- , I^- , NO_3^- , HCO_3^- , CO_3^{2-} , HSO_4^- , SO_4^{2-} , $H_2PO_4^-$, HPO_4^{2-} , PO_4^{3-} , $(OC_nH_{2n+1})^-$, $(C_nH_{2n-1}O_2)^-$, $(C_{n+1}H_{2n-2}O_4)^{2-}$ where $n = 1-20$

and their mixed salts and mixtures, where

A^+ is the valence of the cation,
 B^- is the valence of the anion and
 a and b are integers,

with the proviso that the compound is electrically neutral.

3. A process as claimed in claim 1 or 2, wherein the metal salt is dissolved in the compound having at least two active hydrogen atoms.

5 4. A process as claimed in any of claims 1 to 3, wherein the metal salt is dissolved in the polyisocyanate.

10 5. A process as claimed in any of claims 1 to 4, wherein the metal salt is used in an amount of from 0.1 to 50 ppm, based on the compound having at least two active hydrogen atoms.

6. A polyurethane which can be produced as claimed in any of claims 1 to 5.

15 7. A flexible polyurethane foam which can be produced as claimed in any of claims 1 to 6.

20 8. A polyether alcohol which can be prepared by reacting H-functional compounds with alkylene oxides using multimetal cyanides as catalysts and which contains at least one metal salt of the formula

$M(A^+)_a X(B^-)_b$, where

25 M is selected from among Li^+ , Na^+ , K^+ , Rb^+ , Cs^+ , Be^{2+} , Mg^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} ,

30 X is selected from among F^- , Cl^- , ClO^- , ClO_3^- , ClO_4^- , Br^- , I^- , IO_3^- , CN^- , OCN^- , NO_2^- , NO_3^- , HCO_3^- , CO_3^{2-} , S^{2-} , SH^- , HSO_3^- , SO_3^{2-} , HSO_4^- , SO_4^{2-} , $S_2O_2^{2-}$, $S_2O_3^{2-}$, $S_2O_4^{2-}$, $S_2O_5^{2-}$, $S_2O_6^{2-}$, $S_2O_7^{2-}$, $S_2O_8^{2-}$, $H_2PO_2^-$, $H_2PO_4^-$, HPO_4^{2-} , PO_4^{3-} , $P_2O_7^{4-}$, $(OC_nH_{2n+1})^-$, $(C_nH_{2n-1}O_2)^-$, $(C_{n+1}H_{2n-2}O_4)^{2-}$ where $n = 1-20$ and their mixed salts and mixtures, where

35 A^+ is the valence of the cation,
 B^- is the valence of the anion and
 a and b are integers,

40 with the proviso that the compound is electrically neutral.